



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,883	04/17/2004	Jean Qiu	NXL-001	8609

32836 7590 05/16/2007
GUERIN & RODRIGUEZ, LLP
5 MOUNT ROYAL AVENUE
MOUNT ROYAL OFFICE PARK
MARLBOROUGH, MA 01752

EXAMINER

BEISNER, WILLIAM H

ART UNIT	PAPER NUMBER
----------	--------------

1744

MAIL DATE	DELIVERY MODE
-----------	---------------

05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,883

Applicant(s)

QIU, JEAN

Examiner

William H. Beisner

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14-19 and 23-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 23-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/19/2007 has been entered.

Election/Restrictions

2. Claims 1-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/8/05.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15, 23 and 24 are indefinite because the structural cooperation between additional "base film" and the rest of the positively recited elements of claim 14 cannot be clearly determined.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 14, 16, 19 and 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorinez (US 5,812,312) in view of Weiner (DE 19952139) or Burke et al.(US 6,597,500).

The reference of Lorinez discloses a micro-pattern embedded plastic optical film (16) (See column 4, lines 19-31) having a plurality of regions formed by contrast features (19) that can be etched into the film (See column 4, lines 44-48).

With respect to claims 28 and 34, while the reference of Lorinez discloses that the contrast features (19) are employed as a sizing grid and the reference disclose the use of microspheres of micron dimension (See column 4, line 34) as a reference size, the reference fails to specifically recite that the grid features have a height or depth of less than five microns (claim 28) or less than one micron (claim 34).

However, in view of the disclosure in Lorinez of the use of microspheres of 1 micron, it would have been well within the purview of one having ordinary skill in the art to employ sizing grid lines of similar dimensions since the sizing grid is disclosed as an alternative means recognized in the art to achieve the same results, provide a microscopic reference. Note when the film is etched as suggested by the reference of Lorinez, contrast features of the suggested dimension would result.

Claim 28 differs further by reciting that each of the regions has a unique identifier.

The references of Weiner and Burke et al. both disclose that it is conventional in the art to provide microscope reference or sizing grids with unique identifiers (See Figure 4 of Weiner and Figure 2 of Burke et al.).

In view of either of these teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the sizing grid of the reference of Lorinez with unique identifiers for the known and expected result of identifying a specific location within the slide surface during microscopic observation.

Art Unit: 1744

With respect to claim 29, the reference of Lorinez discloses a base layer (11) having a thickness greater than that of the optical film (16).

With respect to claims 14 and 30, as discussed above with respect to claim 28, the optical film (16) would have contrast features having a depth or height less than five microns or one micron and therefore would have a depth or height less than a dimension of a cell. Also, element (11) of Lorinez meets the recited "supporting component" bonded to the film to form a volume (23,22) that is capable of holding a liquid having cells.

With respect to claim 25, see the discussion of claims 14 and 30 above. Also, the recited contrast features are considered to observable during microscopic viewing of any cells without refocusing (See column 4, lines 32-36).

With respect to claim 26, in the absence of further positively recited structure, the resulting laser etching structure is considered to meet the intended structure of claim 26.

With respect to claims 31, 32, 33 and 35, the contrast features would be less than five microns or one micron for the same reasons as discussed above with respect to claims 28 and 34.

With respect to claims 16 and 27, the reference of Lorinez discloses the use of an adhesive (See column 3, lines 19-31) to bond the optical film (16) to supporting component (11).

With respect to claim 19, provision of a plurality of chambers within the substrate (11) of Lorinez would have been well within the purview of one having ordinary skill in the art for the known and expected result of providing a plurality of separate chambers for viewing different and/or isolated samples on a single device.

Art Unit: 1744

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable Lorinez (US 5,812,312) in view of Weiner (DE 19952139) or Burke et al.(US 6,597,500) further in view of Barbera-Guillem et al.(US 2002/0072113).

The combination of the references of Lorinez and either Weiner or Burke et al. has been discussed above.

With respect to claims 17 and 18, while the reference of Lorinez discloses the use of an adhesive, the reference is silent as to the specific type of adhesive employed.

The reference of Barbera-Guillem et al. discloses that the use of a variety of adhesives is known in the art when attaching a film to a substrate within an optical observation device (See paragraph [0029] and [0031]).

In view of this teaching, in the absence of a showing of criticality and/or unexpected results, it would have been obvious to one of ordinary skill in the art to determine the optimum adhesive to employ based on design considerations such as the intended use and/or specific materials of construction while maintaining the efficiency of the device.

Response to Arguments

10. With respect to the rejection of Claims 28 and 29 under 35 U.S.C. 102(b) as being anticipated by Weiner (DE 19952139), this rejection has been withdrawn in view of the amendments to the claims and related comments (See pages 7-8 of the response filed 2/19/2007). Note a new ground of rejection has been applied over the combination of the references of Lorinez (US 5,812,312) in view of Weiner (DE 19952139) or Burke et al.(US 6,597,500).

Art Unit: 1744


11. With respect to the rejection of Claims 14-19 and 21-29 under 35 U.S.C. 103(a) as being unpatentable over Iwaki Glass (JP 2001-17157) in view of Koezuka et al.(US 5,712,161), this rejection has been withdrawn in view of the amendments to the claims and related comments (See pages 8-10 of the response filed 2/19/2007). Note a new ground of rejection has been applied over the combination of the references of Lorinez (US 5,812,312) in view of Weiner (DE 19952139) or Burke et al.(US 6,597,500).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


William H. Beisner
Primary Examiner
Art Unit 1744

WHB